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TONAL COUNTERPOINT

IN THE STYLE OF
THE EIGHTEENTH CENTURY

Outline
by
Ernst Krenek

\$1.50

BOOSEY and HAWKES

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Preface

The purpose of this manual is to present the subject matter in concentrated form for the use of teachers and students who can devote only a limited amount of time to the study of tonal counterpoint.

Reference to the eighteenth century implies a limitation in that we shall not try to cover all phases of contrapuntal practice which were developed during the three hundred years of the reign of tonality. The student will be made acquainted with a style corresponding to that of the period in which the older techniques of counterpoint were integrated with the modern idiom of tonality, a process which found its consummation in the works of J. S. Bach.

By the same token reference to the eighteenth century implies a generalization, as the technical instructions of this text do not aim at a faithful replica of Bach's personal style. This would require painstaking analysis of innumerable details, not only far beyond the scope of this study, but also of little value to a student who is expected to acquire in a short period of time a working knowledge of a certain compositional practice.

For this reason we have refrained from quoting examples from Bach's works. Such examples, obviously not written to demonstrate technical procedure, would nearly always contain a number of details which had to remain unexplained for the time being and thus would tend to confuse the student. Our own examples are designed to focus the student's attention on the point under discussion and to illustrate it as succinctly as possible. After having covered this material, teacher and student will have no difficulty in finding analogies in the literature.

This outline discusses actual compositional procedure as far as the writing of brief two-part and three-part inventions requires it, including the application of double counterpoint and canonic devices. Although the fugue does not demand a contrapuntal technique essentially different from that explained on the following pages, it is not dealt with in this manual, since writing fugues involves considerations of structure which transcend the limits of this study.

Assignments which summarize the consecutive phases of the subject are indicated at the end of the relevant sections of the text. The student may find it useful to practice technical details (according to need and available time) by writing, in addition to the larger assignments, short exercises concerning such details, as he goes along.

LOS ANGELES
NOVEMBER 1953

Introductory Remarks

The music to which the student is introduced in this outline is essentially conceived for instruments, mainly such as violin, violoncello, flute, organ or piano. (While eighteenth century keyboard music was written for instruments different from the modern piano, we have become used to disregarding this fact and find it perfectly satisfactory to perform that music on the piano.) Even the vocal music of the era of Bach is evidently permeated by the peculiarities of the instrumental style of the period.

The flexibility of the instruments provides an inexhaustible wealth of melodic and rhythmic motions, and it is these which are mainly responsible for shadings of mood and expression. While the music is soulful and sensitive, the emotional exuberance and dramatic intensity, so familiar in the romantic music of the nineteenth century, are absent. Consequently extreme contrasts in tempo, range and dynamics are rarely found.

The art of counterpoint consists in regulating the intervals generated at any given point by the simultaneous progress of two or more melodic lines according to some principle set up beforehand and recognized as aesthetically satisfactory. These principles have varied throughout the history of music, ever since the idea of polyphony was introduced into the art music of Western civilization. The principle governing eighteenth century counterpoint is tonal harmony, in the sense that the sound-combinations arising among the simultaneous melodies are expected to correspond to the rules established in regard to chord progressions in the realm of tonality. Basic knowledge of these rules is a prerequisite for using the present manual.

TONAL COUNTERPOINT

IN THE STYLE OF

THE EIGHTEENTH CENTURY

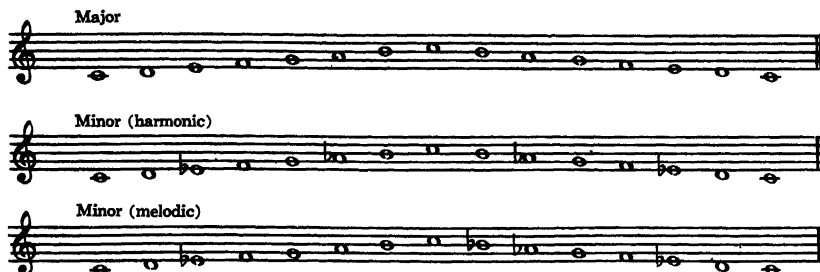
1. VOCABULARY

The vocabulary is the major and minor modes and their transpositions to all degrees of the chromatic scale.

Chromatic alterations of all tones of the diatonic scale are available. Their use will be discussed in later sections of this manual.

In ascending stepwise approach to the tonic and in descending stepwise departure from the tonic the minor scale is usually employed in the form known as "melodic minor" (with a raised sixth degree in ascending motion and a lower leading tone in descending motion), in order to avoid the melodic interval of the augmented second.

Example 1



How to avoid clashes and cross-relations between the divergently altered tones of the melodic minor scale, will be discussed in the section on two-part counterpoint.

2. RHYTHM (Time relationships)

The following basic rhythmic values are available:

Example 2

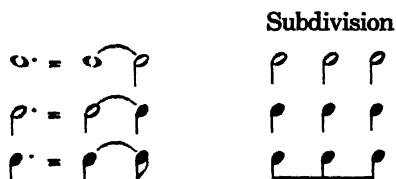


(Thirty-seconds should be used only sparingly in very slow tempo.)

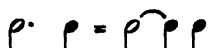
Any basic rhythmic value comprises two values of the next smaller category and may be subdivided into two of these smaller values.

A rhythmic value to be subdivided into three of the next smaller category is indicated by adding a dot to the respective basic value. The dot augments the rhythmic value by 50% of its duration.

Example 3



The dot may also be used, with the same function, in contexts based on subdivision of basic values into two smaller ones. In such cases the dot indicates that the basic value is extended so as to include the first of the two smaller values which make up the next basic unit:



The subdivision into three smaller values of a non-dotted note or any other irregular subdivision, is not available. (e.g., triplet)



3. METER (Accent conditions)

The music under consideration is based on regularly recurring accent patterns, i.e., permanent repetition of groups of accented and unaccented beats. These groups are known as bars or measures.

Arrangements and subdivisions of the basic and augmented rhythmic values are available in the metric schemes shown in example 4.

Example 4

a) Duple time

b) Triple time

c) Quadruple time

Subdivision

6 4
into two
and three
and two
etc.

6 8
into two
and three
and two
etc.

2 2 2
into two
etc.

2 4
into two
etc.

Subdivision

9 8
into three
and three
and two
etc.

3 3 2
into three
and two
etc.

3 4
into three
and two
etc.

3 3 3
into three
and two
etc.

Subdivision

12 8
into four
and three
and two
etc.

4 4
into four
and two
etc.

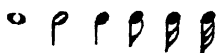
4 8
into four
and two
etc.

// indicates primary (strong) accent
/ indicates secondary (lesser) accent
_ indicates unaccented beat

2. RHYTHM (Time relationships)

The following basic rhythmic values are available:

Example 2

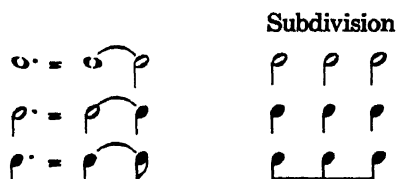


(Thirty-seconds should be used only sparingly in very slow tempo.)

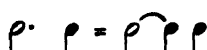
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Example 4

c) Quadruple time

b) Triple time

a) Duple time

Subdivision

6 4
into two
and three
and two
etc.

6 8
into two
and three
and two
etc.

2 2 2
into two
etc.

2 4
into two
etc.

Subdivision

9 8
into three
and three
and two
etc.

3 3 2
into three
and two
etc.

3 4
into three
and two
etc.

3 3 8
into three
and two
etc.

Subdivision

12 8
into four
and three
and two
etc.

4 4
into four
and two
etc.

4 8
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and two
etc.

// indicates primary (strong) accent
/ indicates secondary (lesser) accent
_ indicates unaccented beat

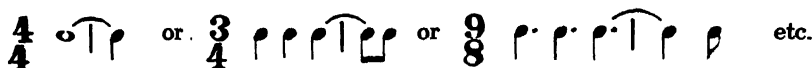
It will be noticed that progressive subdivision creates secondary accents on beats which on a higher level of subdivision remain unaccented.

For practical purposes there is no essential difference between 6/4 and 6/8; 3/2, 3/4 and 3/8; 2/2 and 2/4; 4/4 and 4/8. Choosing one or the other of these metric schemes depends mainly on character and mood of the music, according to traditions established in the literature. For information on these consult especially Bach's "Well-tempered Clavier".

Ties are used to create rhythmic values of duration different from those of the basic or dotted rhythmic values.

Ties are always used when a tone is held across a barline:

Example 5



Ties are also usually employed when a tone is held over from one unit of the metric subdivision into the next unit within the same bar, even if the duration of such a tone could be expressed by a basic or dotted rhythmic value.

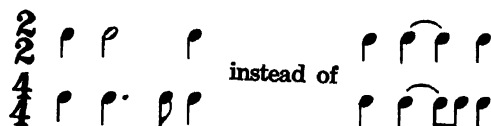
Example 6

Subdivision units

6/4	¹ ♩	² ♩	♩	not thus:	♩	♩	♩
	♩	♩	♩	not thus:	♩	♩	♩
9/8	¹ ♩	² ♩	³ ♩	never thus:	♩	♩	♩
3/4	¹ ♩	² ♩	³ ♩	better than:	♩	♩	♩
4/4	¹ ♩	² ♩	³ ♩	not thus:	♩	♩	♩

In duple and quadruple time the following is acceptable:

Example 7



Holding over a tone into the following accented beat eliminates the articulation of that beat. This procedure should be used occasionally to enhance liveliness and elasticity of the melodic line, since constant articulation of all accented beats tends to make it sound wooden and mechanical.

Example 8



4. MELODY

The discussion of the following section is devoted to the study of single-voiced melodies, without counterpoint or accompaniment

A. INTERACTION OF PITCH CHANGE AND RHYTHMIC MOTION

The melodies which make up the fabric of polyphony may be understood as manifestations of a stream of energy the fluctuations of which are made perceptible in the tones through which the melodic lines proceed Upward motion indicates increase of energy, downward motion the opposite Skips indicate sudden changes of energy (the larger the skip, the more drastic the change), stepwise motion indicates gradual changes

The fluctuations of energy indicated by the motion of the melodic line through various pitches are reflected in the rhythmic organization of the melody, i.e., in the relative duration of its tones. Small rhythmic values (short tones) condense the changes of pitch into short time spans and indicate rapid fluctuations of energy, long rhythmic values indicate the opposite.

Example 11



Example 11 shows a melodic line beginning with a manifestation of great energy (octave skip up) which is very gradually released (scalewise motion down) without rhythmic articulation.

Example 12



In Example 12 the release of energy takes 17 times as much time as the build-up (8 quarter notes vs. 1 eighth note).

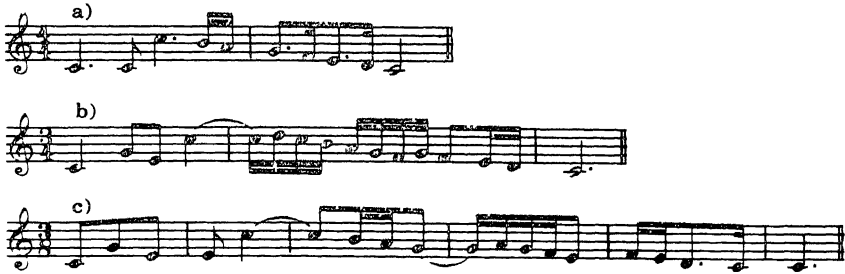
Example 13



In Example 13 the release takes the same amount of time as the build-up. The build-up is sudden, but relatively slow (2 quarter notes), while the release is gradual, but fast (6 sixteenth notes). The equality of the time spans causes the configuration to produce a quasi-symmetrical correspondence of opposing elements. Because of this multiple balance Example 13 comes so far closest to the aesthetic concepts underlying eighteenth century polyphony.

Since complete canceling out each other of energy created and expended is ideally seen as the net result of any musical process, a situation in which the energy level is zero must not be reached before the melody is meant to come to its end. In this respect Examples 11 to 13 would be satisfactory only if no continuation of these melodies were contemplated.

Example 14



Example 14 shows three variants of the same basic melodic design. In 14 a) the rhythmic detail is a little more complex through introducing dotted quarter notes in the first bar, dotted eighth notes in the second

In 14 b) the upward skip of an octave is broken through interpolation of tones (E, G), and similarly the downward motion is briefly interrupted when it reaches F.

14 c) shows a slightly elaborated and extended version of the design of 14 b). Examples 15 to 17 demonstrate other types of melodic design as a result of combining the elements studied so far

Example 15



In Example 15 the energy manifest in the ascent of the first five notes is condensed by returning once more to A (last eighth of the first bar) and used to reach a still higher level — F — in one straight skip. This drastic build-up is released over a span of two bars, first by dropping below the level of the beginning down to G sharp, then swinging back to this level by returning to A with an exact retrogression of the first five notes.

Example 16



Example 16 shows the opposite of the design of Example 13. The energy lost in the downward skip of an octave is gradually recovered in two ascending moves. While the first of these covers the interval of a sixth (from F to D), the second spans a seventh (G to F). The larger amount of energy needed for this greater effort is symbolized in the accumulation of smaller rhythmic values (sixteenth notes) in the second ascent.

Example 17



Example 17 being slow and of a lyrical nature, the melodic energy fluctuates within narrower limits and consequently the manifestations of these changes are less drastic than in the previous examples. The idea of the design consists in compensating gradually for the drop of the pitch level from D to E by regaining the higher level in a series of gently undulating moves. The ascent covers exactly twice as much time as the drop (10 quarter beats vs 5). According to the mood of this melody the ascending motion represents reposefully settling on the original level, not recapturing it with a conquering gesture, as was the case in Example 16. Consequently the ascending motion of Example 17 slows down toward the end (longer rhythmic values), which is the opposite of what happened in Example 16.

B. HARMONIC BACKGROUND

In non-tonal idioms (such as the modal idiom of the Middle Ages or the contemporary atonal one) the articulation of any single melodic line mainly rests upon the elements discussed so far (changes of pitch, length of tones and, to some extent, distribution of accents). In the tonal idiom as a most important factor is added the harmonic background which is implied in the melodic line, even if this line is sounded alone. It becomes manifest in the selection of tones of which the melody consists and through their location in the rhythmic and metric design.

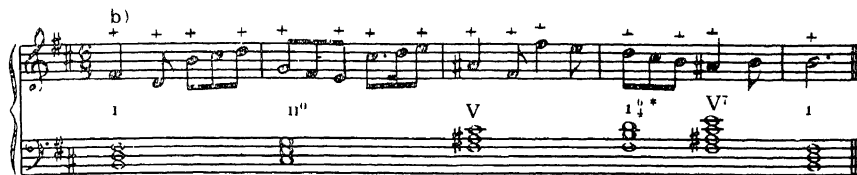
The sequence of chords implied in the progress of the melodic line is regulated by the principles of tonal harmony. The harmonic background of the melodies discussed in this section consists of diatonic chords only (triads and seventh chords build upon the degrees of the scale of the chosen key and utilizing only the tones of that scale).

In the following examples the chords implied in the melodies are indicated by the conventional symbols (large Roman numerals for major chords, small Roman numerals for minor, etc.). Since the melodies discussed here are meant to be played without additional voices or accompaniment, it is not necessary to think of the harmonic background in terms of an elaborate and consistent harmonization. Nonetheless the implied chords must be clearly visualized and be represented in the melody through their characteristic tones. At least some of these tones should be placed on accented parts of the metric scheme because it is there that they will receive the necessary dynamic emphasis. The non-chord tones of the melodic line generally belong to the categories of passing tones, alternating tones or suspensions (*appoggiaturas*). This subject will be treated more fully in the section on two-part counterpoint.

In Example 18 the implied chords are notated schematically in the second staff. Their characteristic tones as represented in the melody are marked by +.

Example 18

* The leading tone in a final cadence will usually be sufficient to imply a dominant chord



* The conventional cadential situation suggests strongly the tonic six-four chord although the melody has no F sharp

According to the nature of tonal harmony and because of the flexibility of the melodic design the chordal implications of a melody may not always be unequivocal, especially in more complex cases. So for instance the harmonies underlying bars 3 and 4 of Example 18 b) could also be heard as follows:

Example 19



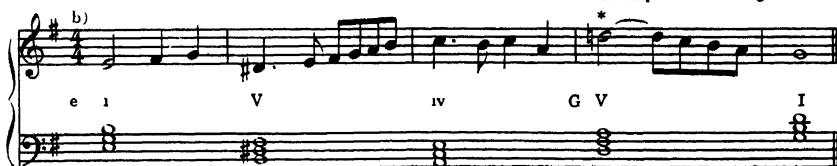
This alternate version does not affect the general constructive meaning of the chord progression suggested in Example 18

In the present section chromatic alterations are introduced only as far as such are necessary to prepare a half-cadence on the dominant of the major mode, or on the relative major of the minor mode, through their own dominant chords. This means that in the major mode the fourth degree has to be raised in order to become the leading tone of the dominant key, and that in the minor mode the leading tone must be lowered to become the dominant of the relative major.

Example 20



* here the 4th degree of G is raised and equals the leading tone of D



* here the leading tone of E is lowered and equals the 5th degree of G

Invention of a melody, then, involves integration and blending of the four elements discussed so far:

change of pitch, and *rhythmic motion*, which are essentially responsible for expressing the fluctuations of energy. These must be fitted into the preconceived *metric scheme* (accent pattern), and coordinated with the *harmonic background* implied in the melodic line and organized according to the principles of tonal harmony.

C. MELODIC DESIGN IN DETAIL

To accomplish this, the following suggestions should be considered:

- a) *Skips* should be used mainly to outline the underlying chords.
- b) *Non-chord tones* should appear mainly in stepwise motion, as passing or alternating tones.
- c) *Rhythmic* configurations and *melodic* elements should be combined so as to form characteristic small musical units known as *motifs*.

Motivic design

Motivic units established in the beginning of the melody should be used consistently to spin forth the design by repeating them in varied forms. The following are some devices of motivic variation.

1. Repetition at a different pitch level.

If literal repetition of a motivic unit takes place immediately after its appearance, on a higher or lower pitch level, the process is called *sequence*. This device is useful especially in spinning forth the design after the initial statement, or in the approach to cadences.

Example 21

The musical notation for Example 21 consists of five staves of music. The first staff, labeled 'a)', shows a sequence of eighth notes in a treble clef with a key signature of one sharp (F#). The second staff, labeled 'b)', shows a sequence of eighth notes in a treble clef with a key signature of one flat (Bb), with a 'Sequence. 1' label above the first measure. The third staff shows a sequence of eighth notes in a treble clef with a key signature of one flat (Bb), with a '1' label above the first measure. The fourth staff, labeled 'c)', shows a sequence of eighth notes in a treble clef with a key signature of one sharp (F#). The fifth staff shows a sequence of eighth notes in a treble clef with a key signature of one sharp (F#), with '1', '2', and '3' labels above the first three measures.

The sequence should not contain more than three statements of the motivic unit. (For other functions of the sequence see section on two-part counterpoint.)

2. Retaining the rhythmic, altering the melodic shape of the motif.

Example 22



3. Retaining the melodic, altering the rhythmic shape of the motif.

Example 23



4. Inversion (change of direction of the melodic motion into its opposite, rhythmic shapes being generally retained unaltered).

Example 24



5. Contraction, by cutting off,

Example 25



or cutting out.

Example 26



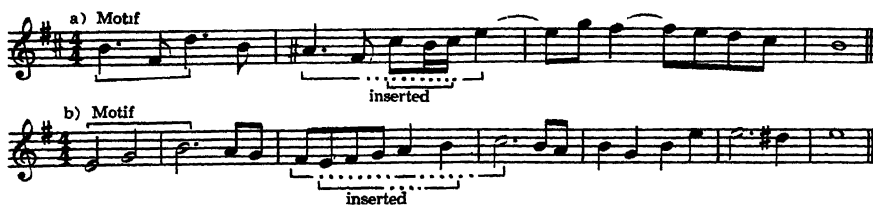
6. Extension, by adding,

Example 27



or inserting.

Example 28



7. Diminution (smaller rhythmic values).

Example 29



8. Augmentation (larger rhythmic values).

Example 30



9. Extracting smaller elements from the motivic units and interlocking the design of the melody by combining these smaller elements in various ways.

Example 31



- d) The *harmonic background* should be so conceived that the key is firmly established at the beginning of the melody. Chord progressions like I - V, I - IV - V, I - vi - V, I - ii - V, will serve the purpose. The chord scheme at

the end should reflect the traditional *cadence*: IV - I₄[♯] - V - I. ii 6, ii 7, IV 7, or vi may be substituted for IV (in the major mode; arrangements in the minor mode are analogous.) The plagal cadence (IV [or iv] - I) may be used occasionally. It occurs more frequently in the minor mode and in polyphonic settings.

Syncopation is used occasionally in cadences in 6/4, 6/8, 3/4, or 3/8 meter in order to produce the so-called *hemiola* effect, by which a 3/2 or 3/4 unit is created on the last six beats of the basic meter.

Example 32



- e) Each phrase of the melody should reach its highest point only once.
- f) The melody should not fall apart into symmetrical phrase units. While such may be appropriate in homophonic, tune-like settings, it is at variance with the principle of continuous flow in polyphonic music.

Example 33



- g) Interest may be added to the melodic design by splitting the melody so that it suggests two separate strands proceeding alternately on different pitch levels. In such cases the highest and lowest tones must show some melodic and rhythmic continuity of their own, apart from the continuity of the whole. The harmonic background must of course apply to the total design.

Example 34

a)

b)

split

Example 35 MODELS

a) Moderato

b) Allegro

c) Allegretto

d) Andante

e) Andantino

f) Larghetto

g) Allegro

h) Allegretto

i) Allegretto

j) Andante

k) Adagio

Assignment 1

Write several one-part melodies in several major and minor keys, different in mood, meter and speed, 4 to 10 bars long, with the harmonic background moving from I through a few diatonic chords and returning to I, after the models of Example 35 a).

Assignment 2

Write several one-part melodies as above, with the harmonic background moving a) in the *major* keys from I through several chords to a half-cadence on V, introduced by the dominant of V; b) in the *minor* keys from I through several chords to the relative major key, introduced by its dominant, after the models of Examples 35 b) and c).

5. TWO-PART COUNTERPOINT

A. INTERVALS

Intervals are classified as consonances and dissonances.

Consonances:

- unison
- minor and major thirds
- perfect fifth
- minor and major sixths
- octave
- minor and major tenths
- perfect twelfth, etc.

Dissonances:

all the rest.

While consonances are acceptable unconditionally anywhere in the musical process, the use of dissonances is subject to special consideration in relation to the accent pattern and the harmonic background.

Dissonances may appear on 1) unaccented, and 2) accented beats.

1. Dissonances on unaccented beats are basically *passing tones* (moving stepwise in the same direction from one consonance to another)

Example 36



or *alternating tones* (moving stepwise up or down from a consonance and returning to the same tone).

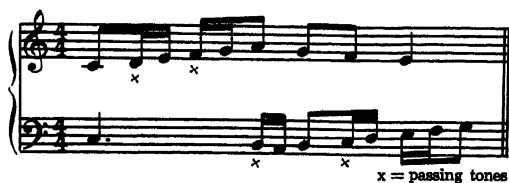
Example 37



Variants:

- a) Relatively accented passing tones. The dissonances appear on beats carrying secondary accents.

Example 38



- b) The consonant tone which should follow the passing tone is delayed, being preceded by its next higher, or next lower, or some other tone.

Example 39



- c) Alternating tones not returning to their basic tone.

Example 40



2. Dissonances on accented beats are basically suspensions, i.e. the dissonant tone is held over from the preceding beat, on which it is consonant, and resolved stepwise down on the following unaccented beat.

Example 41



Variants:

- a) The resolution occurs later than on the unaccented beat immediately following the dissonance.

Example 42



- b) The dissonance is not prepared by being held over from the preceding beat (*appoggiatura*).

Example 43



x = appoggiaturas

- c) The resolution is delayed by interpolating one or more tones (or rests) between the dissonance and its resolution.

Example 44



x = interpolations





- d) The dissonance is resolved upward instead of down. This occurs more frequently when the upward resolution requires a half-step (most frequently when the leading tone forms the dissonance). Occasionally a whole-step up may also serve to resolve the dissonance.

Example 45



- e) Anticipated resolution: the resolution is sounded before the accented beat on which it is expected to enter.

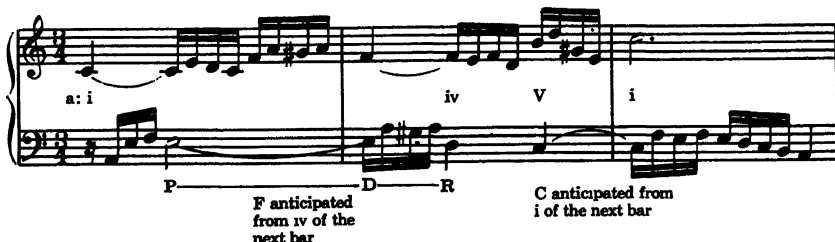
Example 46



x = anticipated resolution

- f) The dissonance is created through anticipation of one or more of the characteristic tones of the chord subsequently suggested by the harmonic background.

Example 47



The variants explained above may in some cases be appropriately combined with one another.

B. SIMULTANEOUS MOTION

Parallel motion in octaves and fifths is not allowed.

Similar motion into octaves or fifths is not allowed, but similar motion into an octave is acceptable at the end of a phrase, when one of the parts moves from the leading tone, the other from the dominant into the tonic.

Example 48



Cross-relation: This phenomenon occurs when an altered tone appears in close vicinity to the unaltered version of the same tone presented by the other part. Although J. S. Bach allows this to happen in some instances, it should be avoided within the scope of the present studies. The danger of cross-relation is particularly acute in the minor mode when one of the parts progresses in the ascending form of the melodic minor scale, and the other in its descending form. The situation may be avoided by separating these two forms sufficiently from one another.

Example 49



C. MELODIC DESIGN IN DETAIL

The two parts should be independent from, but related to each other.

1. Independence of the parts is achieved

a) melodically:

I. by contrary motion (the two parts move simultaneously in opposite directions)

II. by oblique motion (one part remains stationary, while the other part moves).

These two types of motion should be more frequent than similar motion.

Parallel motion should be used only rarely and be limited to a few consecutive tones.

b) rhythmically:

by complementary rhythm (while one part has longer rhythmic values, the other part moves in shorter rhythmic values. This will happen automatically when oblique motion takes place melodically.)

Accumulation of shorter rhythmic values in both parts is useful in the preparation of climaxes.

Example 50

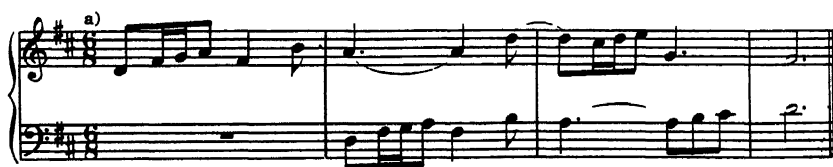


2. Relatedness of the parts is achieved by similarities of the motivic design. This principal is called *imitation*.

Imitation

Two-part inventions frequently begin with imitation of the opening motif, i.e. the second part enters with a repetition of the motif after the motif had been presented by the first part alone. The imitation usually occurs at the interval of an octave, or a fourth below or a fifth above the original statement (i.e. at the dominant), in order to fit the harmonic background through which the key should be firmly established.

Example 51





If the imitation occurs at the fifth, it may occasionally be necessary to adjust the intervals of the motif somewhat, especially if the motif contains characteristic melodic progressions from I to V, or from V to I. In such cases the harmonic background may require that such progressions be "answered" (i.e. represented in the imitation) by corresponding progressions from V to I, to I to V, respectively.

Example 52

This process is known as *tonal* imitation, while the imitation shown in Example 51, which leaves the intervals of the motif unchanged, is called *real*.

Imitation in a more general sense is not confined to the opening section of the invention. It should be used freely and flexibly throughout the whole composition, applying to various smaller or larger particles of the melodic design, in order to assure consistency of the overall design. The modifications of motivic elements studied in section 4C should be employed freely and with imagination.

Continued strict imitation maintained throughout the course of the whole composition, or a substantial part thereof, is called *canon* (see later).

In the approach to final cadences syncopation continued over a number of consecutive beats in connection with suspension dissonances is idiomatic in the style under consideration.

Example 53

Example 53 consists of two musical staves, labeled 'a)' and 'b)'. Both staves are in 3/4 time and feature a treble and bass clef. Staff 'a)' is in the key of D major (two sharps) and contains a melodic line with a syncopation marked over the final two measures. Staff 'b)' is in the key of A major (three sharps) and also contains a melodic line with a syncopation marked over the final two measures. The syncopation in both staves occurs on the third beat of the final measure, where the melody is sustained while the bass line moves.

D. COMPLETE INVENTIONS

The inventions to be studied here usually consist of two sections. The first section corresponds to those of the examples presented so far which, in the major mode, lead to a half-cadence on V or, in the minor mode, to a half-cadence in the relative major key.

i. Diatonic Development

The second section consists of further development of the motivic material, mainly in sequential form. Toward the end of the section the original key must be re-established by means of a full cadence as discussed before. The second section is usually somewhat longer, and never shorter, than the first.

In order to accomplish a smooth return to the original key, the tones characteristic of the dominant key, or of the relative major, must be avoided soon enough after the beginning of the second section and the characteristic tones of the original key re-introduced.

Example 54

Allegro

half-cadence second section

V (- G I) G V

I C iii vi ii V I

Note: The second section begins with the dominant of G (V of V). The pivot of the return modulation is the e minor chord in bar 8. It is vi in G, at the same time iii in C. In the following bar the F sharp is replaced by F natural, which accomplishes the return modulation.

Example 55

Andantino

half-cadence second section

G ii V iii vi e i V

i iv V i iv V i

Note: The second section begins with an inversion of the opening motif (a) in the lower voice. The pivot chord is the e minor chord in bar 12 (vi in G, i in e). The D sharp of bar 13 (characteristic of e minor) is far enough from the D natural of bar 11 to avoid cross-relation. In bar 17 the second motif of the first section (b) is taken up again to assure unity of design.

Example 56

Allegretto

half-cadence

second section

Note: In this example the leading tone (A natural) of the dominant key (B flat) is not used at all at the half-cadence concluding the first section. The return to E flat is therefore easy to carry out, since A flat may be used immediately after the beginning of the second section.

Example 57

Allegretto

half-cadence

second section

Note: The sequence at the beginning of the second section presents an expanded version of the motif (a) of the ending of the first section (skip of an octave down instead of a sixth). Observe the accumulation of small rhythmic values in preparation of the climax in bars 9 to 11.

Further examples:

Example 58

Andantino

half-cadence

second section

The musical score for Example 58 is written for piano. It begins with a treble and bass staff. The tempo is marked 'Andantino'. The key signature has one sharp (F#). The first system ends with a half-cadence. The second system, labeled 'second section', continues the piece with a similar melodic and harmonic structure.

Example 59

Allegro

half-cadence

second section

The musical score for Example 59 is written for piano. It begins with a treble and bass staff. The tempo is marked 'Allegro'. The key signature has two sharps (F# and C#). The first system ends with a half-cadence. The second system, labeled 'second section', continues the piece with a similar melodic and harmonic structure. The third and fourth systems continue the piece, showing a variety of musical textures and rhythms.

Allegro moderato

half-cadence

second section

Example 61

Andantino

half-cadence second section



Assignment

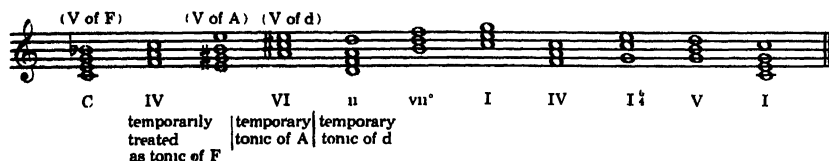
Write several two-part inventions, different in tempo, meter, character and mood, in different major and minor keys, after the models of Examples 54 to 61.

ii. *Modulatory Development*

In the examples given so far only such chromatic alterations were used as were necessary in order to modulate to the dominant of the major mode, to the relative major of the minor mode, and back from both to the original key.

Additional artistic interest may be created by letting the first phase of the second section of the invention move harmonically through some of the keys closely related to the central tonality of the composition. The chromatic alterations introduced for this purpose are as a rule characteristic tones of intermediate dominant chords, i.e. chords which in relation to the chord immediately following them function as dominants of the key, of which that latter chord is temporarily regarded as a tonic.

Example 62



The chord progression of Example 62 forms the harmonic background of a modulatory treatment of the second section of Example 60:

Example 63



(V of b) (V of C#) (V of b)

A⁺ I⁺ IV⁺ ii⁻ iii⁻ i⁻ I⁺ V I

temp
tonic
of b temp
tonic
of C# temp.
tonic
of b

Example 64 forms the harmonic background of a modulatory version of the second section of Example 59:

Example 65

Assignment

Write several inventions after the models of Examples 63 and 65.

In more extended inventions it is recommended to finish the first phase of the second section with a half-cadence on vi, iii or ii in the major mode, on V or VI in the minor mode. This half-cadence should have still less finality than the half-cadence which concluded the first section.

Example 66

Allegro moderato

1st half-cadence second section

C I (vii° of d) ii

v1^b
= e iv^{alt} i

half-cadence
on V (e) = F V
VI

I
= a VI vii° i vii°

i° iv I⁴ V i

Detailed description: This block contains five systems of musical notation for piano accompaniment. The first system is divided into a '1st half-cadence' and a 'second section'. The first system has a treble clef with a C major key signature and a bass clef with a D major key signature. The second system has a treble clef with a C major key signature and a bass clef with a D major key signature. The third system has a treble clef with a C major key signature and a bass clef with a D major key signature. The fourth system has a treble clef with a C major key signature and a bass clef with a D major key signature. The fifth system has a treble clef with a C major key signature and a bass clef with a D major key signature. The annotations include Roman numerals (C I, vii°, ii, v1^b, i, V, VI, I, vii°, i, iv, I⁴, V, i) and specific chord names (e iv^{alt}, F V, a VI).

Example 67

Allegro

1st half-cadence second section

Detailed description: This block contains two systems of musical notation for piano accompaniment. The first system is marked 'Allegro' and has a treble clef with a C major key signature and a bass clef with a D major key signature. The second system is divided into a '1st half-cadence' and a 'second section'. The second system has a treble clef with a C major key signature and a bass clef with a D major key signature.

half-cadence

Example 68

Andante con moto

1st half-cadence

second section

half-cadence

Moderato

1st half-cadence second section

half-cadence

Example 70

Adagio

1st half-cadence

second section



Assignment

Write several inventions after the models of Examples 66 to 70.

iii. Additional Chromatic Alterations

- a) Intermediate dominants may also be used in the first section of the invention.

Example 71

Allegretto

V of ii

G I V I IV

V of V V of iii half-cadence

ii v iii D IV⁷ V I d¹ = a iv

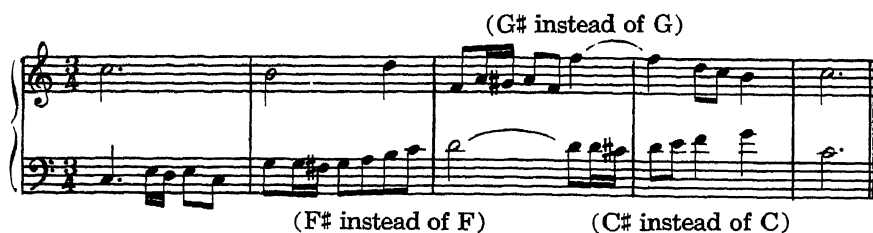
second section

v i¹ e:iv v C:iii i



- b) If a downward alternating tone diatonically involves a whole-step, the alternating tone is frequently raised so as to form a half-step, after the fashion of a leading tone.

Example 72



- c) Chromatic passing tones. especially in compositions in the minor mode chromatic passing tones may be occasionally inserted between the diatonic steps of the scale. This will usually produce mournful expression.

Example 73





Assignment

According to the time available write several more inventions, incorporating freely the procedures and devices studied in this section.

E. DOUBLE COUNTERPOINT

This is a technique by which two parts are so written that they may switch their relative position as upper and lower part without their contrapuntal relationships becoming unsatisfactory. Assuming that one of the two parts remains stationary, the other part is transposed an octave, a tenth or a twelfth, so that it is transferred to the other side (higher or lower) of the stationary part.

Through the process of transposition the intervals between the two parts are transformed into their complementary intervals within the range of the transposition.

In order to avoid crowding of parts, it may be advisable to transpose the "stationary" part an octave in the direction opposite to that of the transposition of the other part. This, of course, does not affect the intervallic relationships of the parts.

i. Double Counterpoint at the Octave

Accordingly in the double counterpoint at the octave the intervals:

1 (unison) 2 (second) 3 (etc.) 4 5 6 7 8

become: 8 (octave) 7 (seventh) 6 (etc.) 5 4 3 2 1

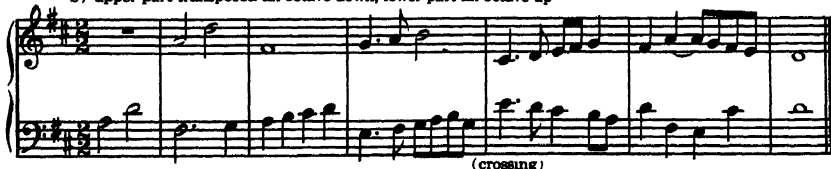
In order to retain satisfactory contrapuntal relationships after the transposition of one of the two parts by an octave, one has to keep in mind that the perfect fifth (a consonant interval) becomes a fourth (a dissonance). Consequently the fifth has to be treated in the original setting with this condition in mind.

Where in the original setting the distance between the two parts is wider than the range of the transposition, the parts will cross after the transposition is carried out, which is occasionally acceptable.

Example 74



b) upper part transposed an octave down, lower part an octave up



ii. *Double Counterpoint at the Tenth*

In the double counterpoint at the tenth the transformation of the intervals is as follows:

1 2 3 4 5 6 7 8 9 10
becoming: 10 9 8 7 6 5 4 3 2 1

The most important feature here is that the third becomes an octave, and the sixth becomes a fifth. Therefore parallel motion in thirds and sixths is not available, since it would after the transposition result in parallel motion in fifths or octaves, which is not acceptable. Consequently in the double counterpoint at the tenth parallel motion is virtually not available at all, only contrary and oblique motion.

Example 75

a)

b) upper part transposed an octave down, lower part a tenth up

iii. *Double Counterpoint at the Twelfth*

The table of intervallic transformations for the double counterpoint at the twelfth is as follows:

1 2 3 4 5 6 7 8 9 10 11 12
12 11 10 9 8 7 6 5 4 3 2 1

The essential detail to be kept in mind is that the sixth (consonant) becomes a seventh (dissonant).

Example 76

a)

b) upper part transposed an octave down, lower part a twelfth up



Special attention must be paid to the fact that in the double counterpoints at the tenth and the twelfth the transposition will affect the key reference of the transposed part and thus the harmonic background of the whole setting. This may make some adjustments necessary, like omission or addition of chromatic alterations (see Example 76).

To produce a satisfactory ending, one of the two parts will frequently have to be adjusted melodically in the last two bars of the transposed setting.

The devices of double counterpoint are mainly utilized in more extended canonic compositions in order to add to the technical sophistication of such works and to enhance their structural articulation (see J. S. Bach's "The Art of the Fugue", *Contrapuncti*).

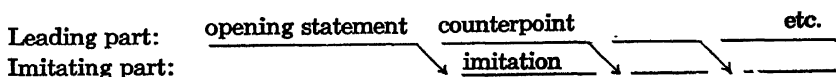
Assignment

Write one or two brief exercises after the model of Example 74 and (optionally) one each after Examples 75 and 76.

F. CANON

A canon is a composition in which strict imitation is carried through the whole work, with the exception of the last few bars, in which arrangements must be made to bring the two parts to a simultaneous ending. The imitation takes place at the interval of an octave, occasionally at the dominant (a fourth below, or a fifth above the initial statement).

The method of writing a canon is to transfer the opening statement, in which the leading part stands alone, immediately to the imitating part, then to proceed in the leading part with a counterpoint fitting the imitation of the opening statement as far as it goes, transferring this to the imitating part, and proceeding with the counterpoint, and so forth, as shown in the following diagram:



The essential problem is not so much writing a correct counterpoint (this is in a canon not different from any other type of counterpoint), but keeping the harmonic background in continuous smooth motion. It must be borne in mind that if the leading part through its characteristic tones expresses a certain harmonic background the imitating part will do the same a bar or so later. Therefore the counterpoint which the leading part produces against the imitation of that passage will not only have to fit that imitation in terms of acceptable intervallic relationships, but it will also have to avoid those tones which are specifically characteristic of the particular harmonic background, or else the musical process will never move along harmonically.

Example 77

Canon at the octave
Allegretto

Observe that the leading part, after the modulation to the dominant (A major) in bar 6, avoids the tone which is most characteristic of A major (its leading tone, G sharp) in bars 7 and 8 to make possible the modulation to B minor in bar 9. Likewise the leading tone of that key (A sharp) is omitted in the leading part in bar 10 in order to prepare the return modulation to D major via the subdominant (bar 12).

Example 78

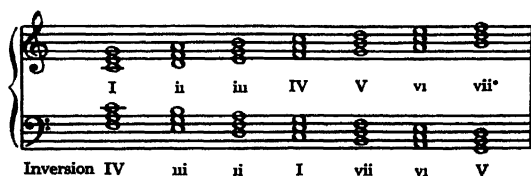
Canon at the lower fourth, (eleventh)
Allegro



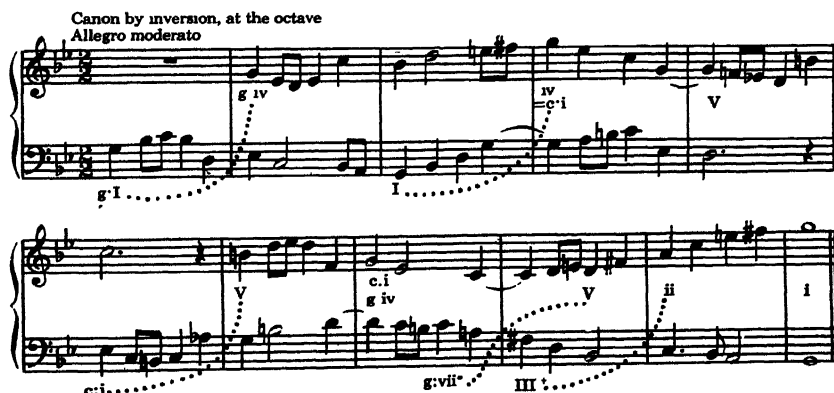
Observe the motion of the harmonic background when the leading part prepares the half-cadence on the dominant (bars 9 to 11). This is of course reflected in the imitating part by the dominant of the dominant (A major, bars 12, 13).

In a *canon by inversion* the imitating part repeats the melody of the leading part in the opposite direction. The interval at which the imitation begins is usually the octave of the tonic (or the unison). It is useful to keep in mind that the harmonic background indicated in the leading part will be reflected in the imitating part as follows:

Example 79



Example 80



are as follows:

Example 81

This may be studied in the following example:

Example 82

Canon by inversion, at the upper fifth
Allegro

The image shows a musical score for a canon by inversion at the upper fifth. The score is written for two staves, treble and bass, in G major (one sharp) and 2/4 time. The tempo is marked 'Allegro'. The score consists of three systems. The first system shows the beginning of the canon, with the treble staff starting on a whole rest and the bass staff starting on a half note G. The second system continues the piece, and the third system shows the end. Roman numerals (I, II, III, IV, V, VI, VII) are placed below the notes to indicate the harmonic structure. The tempo is marked 'Allegro'.

Assignment

Write two canons (one having the leading part on top, the other at the bottom) after the model of Example 77 and (optionally) one canon each after Examples 78, 80 and 82.

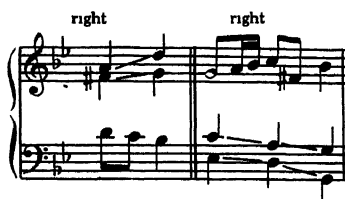
6. THREE-PART COUNTERPOINT

All principles and considerations studied so far apply to contrapuntal settings of three or more parts.

Distance of parts: In general, the distance between the upper parts should not exceed an octave. For the sake of variety of timbre this condition may be modified occasionally (see Example 85, bars 6 to 7, and 11 to 12). The lowest part may be as far away from the middle part as desired. Writing for the piano one must see to it that the setting remains within the reach of two hands.

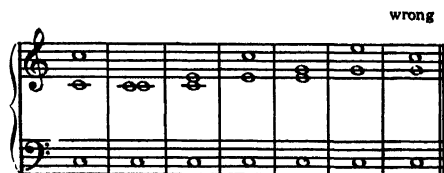
Simultaneous motion: Similar motion into fifths and octaves is acceptable if it occurs between the middle part and one of the outer parts, especially if the third part has contrary motion.

Example 83



Endings: At the ending all three parts may sound the tonic. If two parts sound the tonic, the third part has the third, never the fifth, of the tonic triad. The three parts may also sound the full tonic triad. In the minor mode the third is frequently raised in the final chord. The lowest part must always have the tonic.

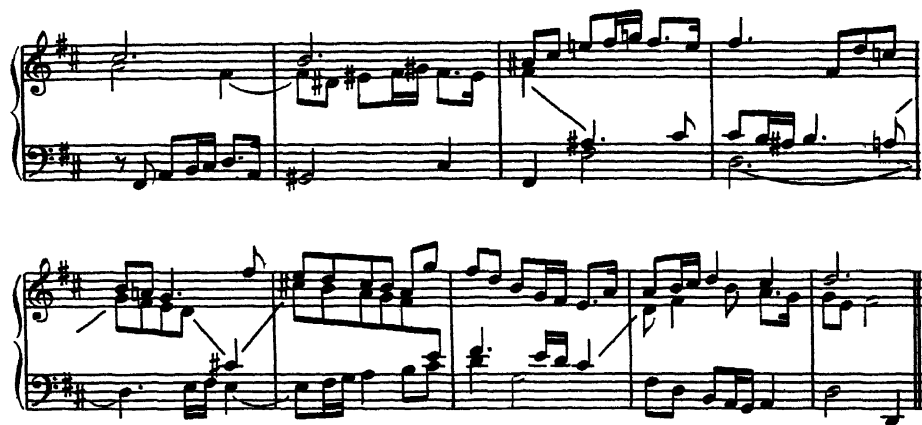
Example 84



Complete three-part inventions:

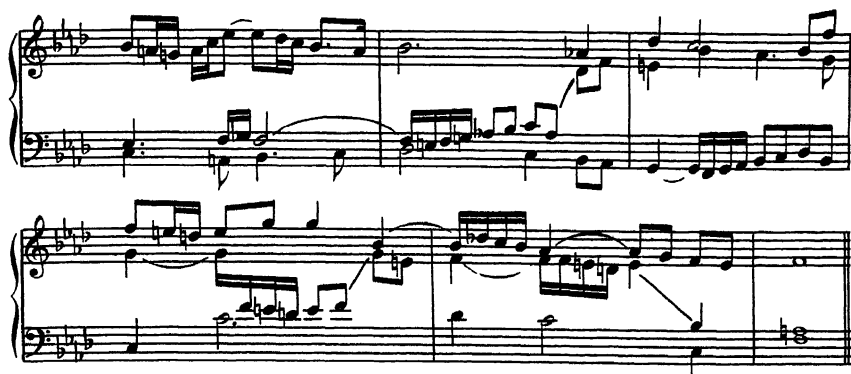
Example 85





Example 86





Three-part canon: In a three-part canon the problem of the harmonic background is again of paramount importance. It is somewhat more difficult to handle than in two parts, since every phase of the melody appears not only twice, but three times.

If the middle voice opens the canon (as in Example 87), the counterpoint must be written with the conditions of double counterpoint in mind, for if for instance, the bottom part follows the middle part (as in Example 87), the counterpoint will at first lie above the imitation of the opening statement, but when the top part enters with its imitation of the opening statement, the counterpoint will lie below it (in the bottom part), and so throughout the whole piece.

The interval at which the second part begins the imitation in relation to the leading part must be the same for the third part in relation to the second, or else the intervallic combinations between the second and third parts will be different from those between first and second, which makes the project impossible of realization.

Example 87

Easier to handle and more promising of a graceful solution is the problem to write a two-part canon with a third part added, presenting a free counterpoint. This additional part will supply complementary rhythms and fill in the harmonic background, thus freeing the canonic parts of certain burdens.

Example 88

Allegretto grazioso

Assignment

Write several three-part inventions after the models of Examples 85 and 86, and one two-part canon with an additional part after the model of Example 88.

